# Trade Policy Options for the Egyptian Automotive Sector

The Zero-for-Zero Option

**SUBMITTED TO**Ministry of Foreign Trade
USAID

### SUBMITTED BY

Assistance for Trade Reform, a Joint USAID-Egyptian Ministry of Foreign Trade Project

WTO Central Department, Trade Agreements Sector Ministry of Foreign Trade

June 2004







This report was made possible through support provided by the U.S. Agency for International Development, under the terms of Contract No. PCE-I-00-98-00016. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.







# Acknowledgments

This report was a collaborative effort between Mr. Steve Magiera, a consultant from the Assistance for Trade Reform Project (ATR), a joint USAID-Ministry of Foreign Trade project, and the WTO Central Department (CD/WTO) Non-Agricultural Market Access team, composed of Ms. Iman Refaat, Mrs. Eman Ahmed, Mrs. Hedi Amin, and Mr. Hani Aboul-Ezz.

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### **Executive Summary**

This paper examines the potential impact of two trade policy changes on the Egyptian automotive sector. The first change would be to lower tariffs on imported parts and components pursuant to the zero-for-zero proposal of the Doha Development Agenda trade negotiations. The second change would be to replace Egypt's current local content scheme that is a likely violation of the TRIMs agreement with a different approach that would be TRIMs compliant. These two policy issues are closely intertwined since the effective tariff paid on parts and components depends on how the local content rule is implemented.

In order to understand the impact of these policies on the motor vehicle sector, it is important to understand some of the sector's more important characteristics. Egyptian consumers purchase around 90,000 vehicles a year, which is in line with the level of demand for vehicles in other countries at a similar income level. This is important because the minimum level of production to attain economies of scale in the assembly industry is around 250,000 vehicles per year. Continued rapid growth in Egypt over the next ten years may bring the total market to a size that can support economies of scale, but for now this is not possible.

Despite the small size of the market in comparison to that required for competitiveness, the motor vehicle sector does make an important contribution to the economy. It represents 3.7% of Egyptian manufacturing output and 1.8% of manufacturing employment. Thus, changes in trade policy for motor vehicles can have a significant impact on the overall economy. Moreover, developments in this industry can have important spillovers for other sectors of the economy.

The motor vehicle sector is one of the most protected economic sectors in Egypt. Tariffs on completely built-up vehicles range from 40% to 135%. Tariffs on components are usually in the range of 20% to 40%. Tariffs on intermediate inputs and raw materials vary from 3% to 54%. Effective protection for the transport sector as a whole is around 46%, compared with an average of 18% for all of manufacturing. For motor vehicle assembly, there is a significant amount of tariff escalation. As a result, effective protection is probably much higher than for the transport sector and may exceed several hundred percent. The tariff regime has probably been successful in expanding the local assembly industry, which now accounts for two-thirds of all passenger cars sales and a much higher percentage of commercial vehicle sales. The cost of this success has been high prices for consumers, what appears to be a very old motor vehicle fleet with little replacement, and a

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fragmented industry which lacks international competitiveness. Possible exceptions are the buses which Egypt has recently begun to export.

Egypt's local content rule allows finished good manufacturers to benefit from input tariffs that vary inversely with the level of local content. On the one hand, assemblers benefit from lower input tariffs. On the other, they must pay a premium for locally produced inputs in order to receive this benefit. The local content rule may add 10% to 20% to the price of locally purchased components. While Egypt's local content rule has supported the development of the local parts and components industry, the system is overly complicated and bureaucratic and has also probably led to various inefficiencies that could harm the long term development of the industry. The local content rule may also violate the WTO TRIMs Agreement.

International competitiveness requires that companies be efficient producers and that they have access to inputs at internationally competitive prices, which Egyptian parts and components suppliers do not have. With regard to the specific policy issues analyzed in this report, zero-for-zero on parts and components might fit in as part of an overall strategy to develop a competitive automotive sector but, on its own, the zero-for-zero proposal would not be beneficial to Egypt. While the zero-for-zero approach on parts and components would benefit the assembly industry and consumers, it would harm the parts and components industry, particularly if local content rules were eliminated at the same time. The harm to industry could be serious since the industry would find it very difficult to compete with imported components that are produced in other countries using raw materials priced at world levels (whereas Egyptian parts and components manufacturers pay tariffs on those raw materials).

If the Government's goal is to foster an export-oriented motor vehicle industry then it would be useful to consider experiences in countries that have been successful in this area. Such countries have become successful by attracting foreign investors with a high quality parts industry and larger markets for final goods from regional free trade agreements. The experience of these countries shows that a competitive assembly industry must be supported by an efficient parts and component industry. Economic growth and Egypt's various regional trade agreements could provide greater potential for scale economies in some products and could lead to new opportunities. It is therefore recommended that Egypt consider policies that focus on developing an efficient parts and components industry. One approach would be to lower tariffs on parts and components as part of a broader across-the-board reduction in tariffs that includes raw materials and other intermediate goods.

Regarding the local content scheme, it is recommended that Egypt move away from its existing program to a simpler, tariff rate-based approach for promoting the development of a local component industry consistent with the policies suggested above. Substitution of a tariff-based scheme is recommended because the wholesale elimination of the local content system would be highly disruptive to the local parts and components industry. By moving to a tariff-based system one can give the industry time to adjust.

There are many models for such a system. Nearly all member countries of the WTO have eliminated local content rules and replaced them with tariff structures that are based on EXECUTIVE SUMMARY V

separate product categories. These categories cover completely built-up vehicles (CBU) and vehicles in completed knock-down condition (CKD). Among the countries with such regimes are Thailand, Indonesia, Malaysia, and the Philippines. Thus it is recommended that the local content rule be eliminated and tariffs initially adjusted so as leave "effective protection" unchanged for each industry. This approach would be WTO compliant and could then form the basis for the gradual reduction of tariffs in the future consistent with the proposal above for promoting the growth of an efficient parts industry. (In some ways this is similar to what was done for the textile and garment industries when the specific tariffs on garments were removed earlier this year.) The precise design of such a set of tariff policies is beyond the scope of this report, but would be a logical follow-on to this effort.

### 1. Introduction

Zero-for-zero has been proposed as one of the negotiating modalities for reducing tariffs during the Doha Round of multilateral trade negotiations. This report reviews the implications of zero-for-zero for Egypt's motor vehicle sector. The report also reviews other trade policy options that Egypt might wish to consider for its motor vehicle sector. In formulating a strategy towards multilateral negotiations, countries should first review their own policies and determine whether those policies are in their own best interest. The report thus begins by reviewing trends in the world motor vehicle market and current conditions in the Egyptian market. It also reviews Egypt's current tariff structure and its local content rule. Any proposal to reduce tariffs must first consider whether Egypt will maintain or eliminate that rule. Most countries have eliminated local content rules as a result of the Uruguay Round TRIMS Agreement and replaced them with tariff structures based on completely built-up and completed knocked-down vehicles. Those tariff structures will then form the basis for negotiation during the Doha Round.

# 2. An Overview of the World Motor Vehicle Industry

The motor vehicle sector involves extensive economic linkages to both downstream and upstream industries. Downstream industries include components, parts, and accessories which have linkages further back to metals, chemicals, plastics, rubber, and other raw materials. Upstream industries include marketing, shipping, insurance, finance, and other services. Commercial vehicles are also used as inputs in a variety of other economic sectors. Because of these linkages, many countries have attempted to use vehicle manufacturing as one means of economic development. But in addition to technological and resource availability factors, competitiveness in motor vehicle manufacturing depends crucially on being able to produce large volumes so as to achieve economies of scale. Thus, few countries have been successful at developing internationally competitive industries.

#### **Economies of Scale in Vehicle Production**

**Passenger Cars Manufacturing**: A minimum economic size of 250,000 vehicles per year, integrated with engine manufacturing, is considered necessary. The unit cost of producing 100,000 units of a small car is 80% higher than producing 400,000 units.

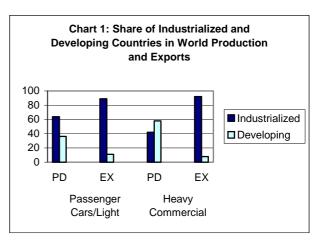
**Passenger Car Assembly**: The minimum economic size is difficult to define, but is perhaps 40,000 vehicles per year.

**Heavy Commercial Vehicle Manufacturing**: There are examples of profitable plants with capacities of 6,000 to 30,000 units.

Source: Karmolkolias

The motor vehicle sector consists of a wide range of products, including passenger cars, buses, trucks, special purpose vehicles, and components. There are significant differences in the demand and production characteristics of each of these products. As result, developing countries may be more competitive in some than in others.

Passenger car manufacturing is typically the most complex of the vehicle processes, and requires significant financial, technical, managerial, and organizational expertise. It is also the vehicle



sector that is in most need of large production volumes for an adequate return on capital. As a result, few developing countries have developed local industries that are efficient and can compete in world markets. Developing countries account for 38% of world production of passenger cars (PCs) and light commercial vehicles (LCVs), but only 8% of world exports (Chart 1).

Many developing countries have been successful at attracting foreign investment in motor vehicle assembly, but this investment has taken place primarily to bypass high levels of trade protection. Motor vehicles are one of the more highly protected sectors in the world. Recently, there have been some exceptions where the investment has been targeted not so much at a protected domestic market, but at penetrating international markets. These exceptions are due mainly to the proliferation of free trade agreements (FTAs). In these cases, foreign investors are attracted by the size of the free trade area. Other critical factors are the competitiveness of the country and how the countries of the FTA fit into the overall strategy of the multinational. Examples of countries where such investment as occurred are in Eastern Europe (EU enlargement), Mexico (the North American Free Trade Agreement), and Thailand (the ASEAN Free Trade Area).

In comparison to passenger cars, production volumes for heavy commercial vehicles tend to be much lower and the labor content per vehicle higher. Simpler designs and less frequent design changes lower the cost retooling and the overall cost of equipment. Also, the high transport costs associated with bulky

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<sup>&</sup>lt;sup>1</sup> For the purposes of this report, motor vehicles consist of those vehicles with four or more wheels, including cars, buses, trucks, and other commercial vehicles. Motorcycles are not included.

bus and truck bodies are a natural barrier against imports. As a result, the production of heavy commercial vehicles can be more suitable for developing countries. Whereas developing countries account for 38% of world production of PCs and LCVs, they produce 55% of the world's heavy commercial vehicles (HCVs).

Components, parts and accessories range from the technologically simple to the highly complex. There are also some parts and accessories that are labor intensive, wiring harnesses for example. Intense competition and efforts to cut costs could provide new opportunities for developing countries in the production of the more labor intensive components. At the same time, however, there have been significant changes in the relationship between vehicle and component manufactures. Increasingly, auto manufacturers are outsourcing components in order to reduce costs. As a result, parts manufacturers have had to assume greater responsibility for the production, quality and design of component systems. Manufacturers are also adopting just-in-time inventory systems at the very time that new models are being introduced at an ever faster pace. For developing countries to succeed in such an environment, they will need sophisticated management systems, the capability to adapt quickly to technology change, and efficient transport systems.

Few developing countries have the extensive research and design capabilities needed to develop indigenous manufacturing capabilities. As a result, most manufacturers in developing countries are teamed with foreign companies either as wholly-owned subsidiaries or as joint ventures. For components that are sourced locally in the developing country, component manufacturers are typically tied to the foreign assembler through exclusive licensing arrangements. If the foreign assembler typically outsources components to 1st tier original equipment manufacturers (OEM), then the licensing arrangement might be with a foreign OEM supplier. In those countries that are developing internationally competitive industries, such relationships are becoming even tighter. In Thailand, for example, Thai-owned parts producers are now forming joint ventures with multinational auto manufacturers and their 1st tier suppliers in order to improve quality and international competitiveness.

#### The Thai Automotive Experience\*

Thailand has a population similar to Egypt's and recently experienced a large influx of foreign investment in automobile manufacturing. It has become the country of choice for investors interested in the ASEAN auto market, and has one of the largest automotive assembling industries in S.E. Asia. Thailand now exports some 200,000 completely built-up vehicles per year. The market is dominated by Japanese manufacturers, but American and European companies have also recently entered the market.

There are 14 vehicle assemblers in Thailand with a total production capacity of 1.1 million units per year. In 2003, production volumes reached 763,000 units.

In addition, there are 700 original equipment manufacturers for parts and 1000 others. Passenger car production has achieved 55% local content; the local content for light trucks if 80%. In order to ensure quality, Japanese and American companies have tended to establish wholly owned or joint ventures with 1st tier suppliers. That companies tend to be 2nd or 3rd tier suppliers, or producers of replacement parts. In recent years, many That companies have joined foreign companies or formed technical arrangements in order to improve quality.

There are four principal factors which underlie Thailand's attractiveness for foreign investment:

- A sizeable market which has been made potentially larger by the ASEAN Free Trade Agreement (AFTA);
- A high quality automotive parts industry which is rated highest in ASEAN by Japan Automobile Manufacturers Association;
- Reasonable political stability;
- A liberal trade and investment policy.

In the case of investment, Thailand is now entirely open to new investors and offers several types of incentives. In the case of trade policy, Thailand abolished its local content requirements for motor vehicle assembly in 2000 and replaced the requirements with a new motor vehicle tariff structure.

\* Based on information from the Thai Ministry of Industry (2002).

# 3. The Egyptian Market for Motor Vehicles

**Market Overview.** Egypt has been very successful at attracting investment by foreign automobile manufacturers. There are now over 20 companies and about 16 factories with a capacity of 225,000 vehicles per year (See Appendix Table 1). This contrasts with only two companies in 1970 and four in 1990. Vehicle production rose from 8,000 thousand in 1970 to 59,700 in 2002, before falling off to 45,000 thousand in 2002. With these increases, the motor vehicle industry now represents a significant, albeit still small, share of the Egyptian manufacturing sector (Table 1). Motor vehicles and parts represent 3.7% of all manufacturing output. Reflecting the capital intensive nature of the industry, its share of manufacturing employment was almost half that at 1.8%.

Table 1: Importance of the Motor Vehicle Sector in the Overall Manufacturing Sector

	Percent of Manufacturing Output	Percent of Manufacturing Employment
Food Processing/Tobacco	23.6	20.0
Metals	10.8	9.4
Textiles and Garments	10.6	24.2
Building Materials/Cement	6.6	3.7
Pharmaceuticals	4.1	2.7
Motor Vehicles and Parts	3.7	1.8
Fertilizer/Chemicals	2.1	1.9
Electronics	1.3	0.9
Furniture/Wood Products	0.7	1.8

Source: CAPMAS Industrial Census, 1999

As is the case in other developing countries, Egypt's assembly plants were established under the umbrella of high levels of trade protection. This policy appears to have been somewhat successful as domestic production of passenger cars now represents 60 percent of total production (Table 2). However, individual assembly plants are currently producing at most 6000-7000 passenger cars per year. Not only is this well under full capacity, but production levels are too small to compete internationally. Several passenger car manufacturers, such as KIA and Peugeot, rent production facilities from other manufacturers.

Sales of new vehicles are running close to 90,000 per year. Of this, two-thirds are passenger cars. This is in contrast to 52% of all production in 1970. As noted later, commercial vehicles typically dominate at early stages of economic development. The passenger car segment of the market is dominated by Europe (32%), South Korea (29%), and Japan (23%), followed by Turkey (12%) and the United States (4%). Sixty-five percent of vehicle sales originate as kits (CKD); the remainder are imported as completely built-up units (CBU).

Table 2: Overview of the Egyptian Motor Vehicles Market in 2000 (1000 Units)\*

	Production	Sales	Imports	Exports
Passenger Cars	40.0	64.6	23.0	Negl.
Commercial Vehicles	19.8	22.9	7.5	0.1
of which: Light Trucks	10.3	19.3	N.A.	Negl.
Heavy Trucks	5.0	1.2	N.A.	0.1.
Buses	2.2	2.4	N.A.	Negl.
Total	59.8	87.5	30.5	0.2

<sup>\*</sup>Although more recent data are available, we have chosen year 2000 since it seems more representative of the Egyptian market in recent years. Supply and demand do not balance because of changes in stocks.

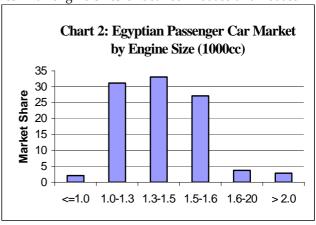
Negl. = Negligible, N.A. = Not Available.

Source: Egyptian Automobile Manufacturers' Association.

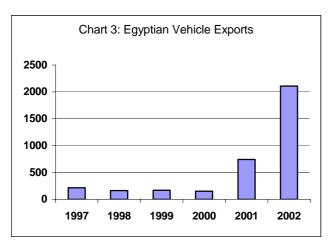
The passenger car market consists primarily of vehicles with engine sizes of between 1000cc and 1600cc

(Chart 2). Within this category, vehicles of 1000-1300cc are almost all imported as completely built-up units. Manufactures argue that the tariff protection for vehicles of this engine size is too low to prevent competition from imports (see the section below on trade policy). Thus, nearly all passenger cars produced in Egypt have engine sizes of above 1300 cc.

Recently, Egypt has been highly successful at exporting select commercial vehicles (Chart 3). In



2003, exports of mini buses and heavy duty trucks were 1000 units each. Egypt has also exported a few passenger cars and other vehicles (100 or less) under special trade deals with China and Iraq. Although other Arab countries are potential markets for Egyptian exports, motor vehicles are on the negative list and do not benefit from zero duties under the Greater Arab Free Trade Area (GAFTA).

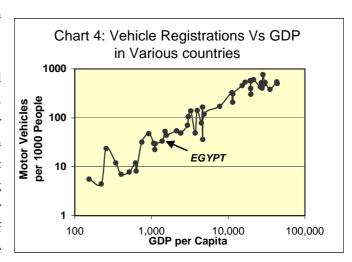


Data on the age distribution of the motor vehicle fleet is unavailable, but *ad hoc* observation indicates that the average age is well above 10 years and that it may be increasing. In recent years, the number of new registration has been only slightly less than sales, indicating that very few vehicles are being taken out of service. Between 1996 and 2002, for example, the number of registered vehicles increased by 357,000 units. Total sales, on the other hand, amounted to 372,000. This would indicate that only 15,000 vehicles out of a total fleet of 2.7 million were

taken out of service. While these numbers are questionable, they do seem to indicate that the vehicle fleet is aging rapidly.

The low replacement rate may reflect high prices for new cars and the lack of environmental standards. Egypt's automobile association believes that the strict enforcement of environmental standards which are comparable to those in industrialized countries would eliminate 40% of the fleet.<sup>2</sup>

The Egyptian Market in the Future. With a population approaching 70 million, Egypt represents a sizable market for automobiles. Currently, there are 2.7 million registered vehicles, or 41.4 vehicles per 1000 people. Although low, the number of vehicles per capita is what might be expected for a country at Egypt's stage of development (Chart 4). There appears to be a very strong relationship between income and the number of registered vehicles. At low levels of income, a one percent increase in income



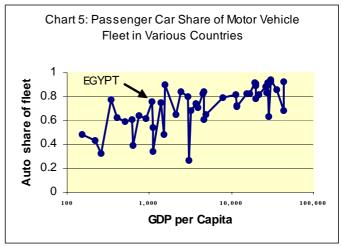
gives rise to more than a one percent increase in vehicle registrations. At high levels of income, the number of registrations starts to level off. At this point, most of the demand for motor vehicles is for replacements.

<sup>&</sup>lt;sup>2</sup> When current environmental standards on autos were introduced, less than 5% of the fleet was taken out of service. These standards were much less stringent than those in Europe. As a safety measure, the Egyptian Automobile Association also recommends that taxis have an age limit of ten years.

The number of motor vehicles also depends on prices (inversely related), road conditions (increasing with the number of paved roads), urbanization (directly

related), and the size of middle class (directly related).

As incomes change, the composition of vehicles within the motor vehicle fleet also changes (Chart 5). At low income levels, people depend more on public transport. The shift from animal to motorized transport of goods also begins at low incomes. Thus, buses and other commercial vehicles tend to make up a greater proportion of the fleet. At higher income levels, passenger cars become more dominant. In the case of Egypt, the proportion of passenger cars in the total fleet is



about 73%. This is rather high for a country of Egypt's stage of development.

In ten years time, the Egyptian market for motor vehicles could be very different than it is today. With a large population, limited purchasing power, and low vehicle registrations, small increases in income could result in much higher automobile sales. Table 3 below indicates what the market might look like over the next ten years.

- Population growth, at 1.7% per annum, could lead to an 18% increase in the motor vehicle fleet over the next ten years.
- Income growth could lead to a 69% increase in the motor vehicle fleet over the next ten years. This assumes an income elasticity of 1.4 and that per capita incomes growth by the World Bank's most likely scenario of 4.1% per annum on a per capita basis [World Bank, 2001].<sup>3</sup>
- The total increase in fleet size due to population and income growth would be 87%, or 2,370 thousand vehicles. In other words, the fleet could almost double in size.

<sup>3</sup> The GTAP model, for example, uses income elasticities of demand which range from 1.3 to 1.6 for developing countries [Hertel, 1997].

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Table 3: Egypt's Motor Vehicle Market over the Next Ten Years

	Resulting Total Percentage Increase in Motor Vehicle Fleet	Total Increase in '000 Units*
Due to Population Growth	18%	490
Due to Income Growth	69%	1880
Total	87%	2370
Average Annual Sales Over Ten Years		237
Annual Sales for 4% Replacement	70,000	109

<sup>\*</sup> Based on a motor vehicle fleet of 2,724 units in 2002.

The above projection implies average annual sales of 237,000 units per year. If the average age of the fleet moves towards 25 years, another 109,000 in sales would be required for replacement (.04 times 2,725 thousand units). This implies total sales of close to 350,000 units. Although this is still below sales in more advanced markets like Thailand, it could nevertheless provide the scale economies necessary for some parts and components to be internationally competitive. Sales could be even higher if taxes are lowered.

# 4. Egypt's Trade Policy for the Motor Vehicle Sector

Egyptian trade policy for automobiles consists of two elements: 1) the local content rule; and 2), the applied tariffs that are listed in the Egyptian tariff code for motor vehicles, parts and components. These two elements operate together so as to determine the tariffs actually paid on imported parts and components.

The Local Content Rule. Egypt's local content rule is laid out in Article 6 of the Egyptian tariff code. The rule consists of two principal sections (Table 4). Under Section A, the tariff on components used in the assembly of finished goods is equal to 90% of the finished good tariff. If, for example, an assembler imports components of a motor vehicle and then assembles the vehicle in Egypt, the tariff on the components would be 90% of the finished good tariff.

Under Section B, the tariff on components depends on a sliding scale that is based on the share of local components in the final value of finished goods. If, for example, the assembly industry reaches 30 percent local content, the tariff on the imported parts would be the finished good tariff after reductions of 30% for local content and an additional 3% (10% of 30%). On net, therefore, the assembler pays only 67% of the finished good tariff.

Table 4: Egypt's Local Content Scheme for Automobile Parts and Components

Requirement	Tariff Reduction	Tariff on Parts as % of Tariff on End Product
Section A		
Components are used in the assembly of an end product	10%	90%
Section B		
Local content is 30%-40% of finished good value	110% of local content	56% to 67%
Local content is 40%-60% of finished good value	115% of local content	31% to 54%
Local content is greater than 60% of finished good value	120% of local content	10% to 28%
Local content is greater than 45% of finished good value		Listed tariff on each part

\* Summarized from Article 6 of the Egyptian tariff code.

Section B also contains a provision that allows assemblers to base their input tariffs either on the sliding scale mentioned above or on the individual component tariffs that are listed in the Egyptian tariff code, whichever are lower. The method is called "itemization" and is allowed only if the manufacture achieves a certain percentage of local content. This percentage is under the authority of the Minister of Industry and was raised for passenger cars from 40% to 45% in year 2000. Higher percentages are apparently required for other motor vehicles such as buses and trucks (70%) and tractors (90%).

In implementing Article 6, several special conditions may also apply:

- For new investments in complex industries, the Government is allowed to offer special tariff reductions of no more than 40%. Approval for the reductions must be requested by the Minister of Industry and approved by the Ministry of Finance. The reductions are conditional on reaching a specified level of local content at some point in the future.
- If a manufacturer in a sub-assembly industry achieves 40% local content, the sub-component can be considered 100% locally produced from the perspective of the finish good industry. An example might be a wiring harness. Even though the harness is assembled locally with only 40% local components, it can be considered 100% local by the motor vehicle assembly industry.

The Ministry of Industry administers the local content rule. The share of local components in the value of the finished good is determined by the Minister of Industry for each assembly industry, in conjunction with the General Organization for Industrialization. The Ministry uses tables of input-output coefficients from major manufacturers in Europe, Japan, Korea, and the U.S., and also conducts audits and site visits of component manufacturers.

**Applied Tariffs under Local Content.** The tariffs actually paid by each segment of the Egyptian motor vehicle industry will depend on the amount of local content and how companies decide to apply the rule. As seen below, this results in a variety of formulas for duties actually paid.<sup>4</sup>

1) If a motor vehicle is imported as a completely built-up unit (CBU), the tariff on the motor vehicle is that listed in the Egyptian tariff code for finished goods.

<sup>&</sup>lt;sup>4</sup> This can lead to confusion since companies understand the duties that they actually pay and the specific formula used to determine those duties, but they may not have a broad legal understanding on how the local content rule is applied.

- 2) If a part or component is imported for sale on the domestic market, the tariff on the part or component is that listed in the Egyptian tariff code for the part or component.
- 3) If a part or component is imported for the assembly into a finished product, the tariff on the parts or component will depend on how the local content rule is applied. A key decision is whether or not to itemize. Itemization involves paying the tariff that is listed in the Egyptian tariff code and is beneficial in those cases where the component tariffs that result from the local content rule are higher than the tariffs listed in the code. For example, finished goods tariffs on passenger cars above 1300cc are 100% to 135%. Even if local content reaches 60%, the tariff on components would be 31% to 73%, compared with an average tariff on imported parts and components of 27%. In this case, companies would prefer to itemize.
  - a) Component Assembly. Typically, output and input tariffs are very similar at around 30%. Examples are engines and wire harnesses. A company which manufacturers components can reduce tariffs by 44% to an average of about 18% (0.56 \* 30%) by achieving 40% local content. Such a manufacturer will find it advantageous to use the sliding scale rather than itemize since the tariffs on individual parts used in manufacturing the component are typically around 30%.<sup>5</sup>
  - b) **Passenger Car Assembly**. Companies involved with the assembly of passenger cars typically achieve at least 45% local content so that they can itemize. At 45 percent local content, the tariff on parts and components for a 1500cc vehicle would be 51% (0.51 times the finished good tariff of 100%) using the sliding scale. This contrasts with an average tariff on parts and components of 27% under itemization.<sup>6</sup>
  - c) **Bus Assembly**. Companies involved in bus assembly can reach 90% local content. Under the sliding scale, this results in component tariffs of 4% (0.1 times the finished good tariff of 40%). Since this is well below the most tariffs on parts and components, bus assemblers use the sliding scale.

Legality of the Local Content Rules under the TRIMS Agreement. Tohamy and Benjelloun [March 2004] conclude that Article 6 is likely to be inconsistent with the WTO TRIMS Agreement and thereby puts Egypt at risk of retaliation by other countries. The TRIMS Agreement contains an Annex that lists measures that are inconsistent with international trade rules in the WTO. Included in the Annex are investment approvals linked to export and measures that require the use of products of domestic origin in order "to obtain an advantage." In the case of motor vehicles in Egypt, assemblers must purchase a certain percentage of their inputs locally in order to obtain reduced tariffs on imported inputs. If "reduced tariffs" on inputs is considered an "advantage" under WTO rules, Egypt's local content rule would appear inconsistent with TRIMS.

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<sup>&</sup>lt;sup>5</sup> Based on discussions with a parts manufacturer.

<sup>6</sup> According to companies interviewed, companies involved with the assembly of passenger cars are required to obtain at least 40% local content as part of the approval process to operate in Egypt.

#### **Other Potential TRIMS Issues**

It was reported that an Egyptian investment by a multinational auto manufacturer was "approved" subject to a 50% export requirement. Such a requirement would be a violation of the WTO TRIMS Agreement.

Some assemblers report that they are required to achieve 40% local content as part of the investment approval process. If such a requirement is still mandatory, it might be inconsistent with the TRIMS Agreement.

**Egyptian Tariff Policy for Motor Vehicles**. Egyptian tariffs for motor vehicles and major components are contained in Chapter 87 of the tariff code. Tariff-lines for parts are spread throughout the tariff code and depend either on the type of part or on the raw materials used in making the part. For example, electronic components are listed in Chapter 85 on electrical goods. Tires are listed in Chapter 40 on rubber items. The tariff structure for motor vehicles has the following characteristics (see Appendix Table A2):

- Tariffs on passenger cars depend on engine size and vary from 40% for vehicles of under 1000cc to 135% for vehicles of over 2000cc.
- Tariffs on trucks and buses are 30% and 40%, respectively.
- In the case of hearse, ambulances, and military type jeeps, there are separate HS codes for each engines size, but the tariffs are identical across all engine sizes. As a result, there are many superfluous tariff codes that could be eliminated. This would also lower Egypt's average tariff.
- In the case of passenger cars, the tariffs on engines and engine parts are 30%.
- In the case of other motor vehicles, the tariff on engines is 10%, but the tariff on parts is 30%. This implies negative tariff escalation and would make it difficult for engine manufacturers to compete with imports of completely built-up engines.
- The tariffs on engine chassis and on motor vehicle bodies are 90% of the finished good tariff.
- The tariffs on nearly all other components and parts are between 20% and 40%. In the case of assembly industries, the tariff actually paid will depend on the local content rule, as discussed above. Assemblers of passenger cars itemize and report an average tariff of 27%. The tariffs paid by bus and truck manufacturers are probably much lower since the local content achieved by these manufacturers is much higher.

Egypt also has a domestic sales tax on motor vehicles. The tax depends on engine size and varies from 15% to 45% as indicated in Appendix Table 2a.

Structure of Protection for Motor Vehicles. With the exception of garments, the transport sector in Egypt receives the highest level of protection of any manufacturing sector in Egypt [Refaat, 2003].<sup>7</sup> In 2002, the average nominal tariff for transport was 39.3%, compared with 15.9% for the manufacturing sector as a whole. The effective rate of protection for transport was 44.6%, compared with 18.6% for manufacturing.<sup>8</sup> Since tariffs on completely built-up vehicles are the highest of any product in the tariff code except alcohol and since there is significant tariff escalation, effective protection for the assembly industry is probably much higher and may exceed several hundred percent.

Trade Barriers in Other Countries. Historically, motor vehicles have been one of the more protected economic sectors worldwide and were subject to high tariffs, non-tariff import barriers, and a variety of marketing constraints. During the past decade, however, there have been significant changes in protection. In developed countries, non-tariff barriers (NTBs) other than those implemented through standards have mostly been eliminated, and tariffs are quite small (Table 5). Government assistance is more in the form of tax breaks and financial incentives, such as support for research and development, education, etc. [Productivity Commission of Australia, 2002]. Although sales taxes on vehicles are quite high in some countries, they are applied indiscriminately on both imported and domestically produced vehicles.

Table 5: Maximum Automotive Tariffs in Selected Countries, 1990 and 2000

Country		1990	2000		
	Passenger Vehicle	Components	Passenger Vehicle	Components	
Australia	40	15	15	15	
Canada	9	25	6	6	
European Union	10	12	10	3.5-4.5	
Japan	0	0	0	0	
Singapore	45	0	0	0	
South Korea	20	13	8	8	
United States	2.5	2.5	2.5	2.5	
Average for Develope	d Countries		5.9	5.1	
China	220	80	50	23	
Egypt			135	40	

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<sup>&</sup>lt;sup>7</sup> Transport in this case would include more products than just motor vehicles (e.g. airplanes).

<sup>8</sup> The averages for nominal and effective rates of protection exclude garments.

150	40	40	40	
200	100	80	50	
40	40	200	35	
50	30	30	10	
200	60	80	20	
60	30	200	60	
ntries	1	101.9	34.8	
	200 40 50 200	200     100       40     40       50     30       200     60       60     30	200     100     80       40     40     200       50     30     30       200     60     80       60     30     200	200     100     80     50       40     40     200     35       50     30     30     10       200     60     80     20       60     30     200     60

Source: Compiled by Productivity Commission of Australia [2002] based on information from APEC, Allen Consulting-Deloitte Touche Tohamatsu, and the TRAINS database. Tariffs for Malaysia have been updated to 2004 in order to incorporate the elimination of local content in Malaysia. Malaysian component tariffs are for CKD and were obtained from the Malaysian Ministry of Industry and Trade.

In developing countries, motor vehicle protection is still quite high and consists of tariffs, non-tariff import barriers and local content measures. Gradually, however, protection is moving more towards tariffs. Many non-tariff import barriers have been phased out, and local content rules are being eliminated as a result of the WTO TRIMS Agreement (Table 6).<sup>9</sup> In some developing countries, tariffs have actually increased as those countries replace NTBs and local content rules with equivalent tariffs.

**Table 6: Status of Local Content Rules in Various Countries** 

Country	Status of TRIMSs Measures
China	Local content and export performance requirements eliminated in 2001 as part of WTO accession.
Indonesia	Local content eliminated in 1999. WTO panel ruled against Indonesian local content scheme.
Malaysia	Local content eliminated in 2004 due to TRIMS.
Philippines	Local Content to be eliminated by 2005. Received extension of deadline from WTO.
Taiwan	Local content eliminated in 2001 as part of WTO accession.
Thailand	Local Content eliminated in 2000.

<sup>9</sup> Some developing countries still maintain licensing restrictions that are effectively quotas on motor vehicle imports. One example is India.

# 5. The Doha Negotiations on Market Access - Tariffs

Negotiations on market access for non-agricultural products are a critical part of the Doha round of trade negotiations. According to the Ministerial Declaration of 2001, the negotiations should aim at reducing or eliminating non-tariff barriers and tariffs, including tariff peaks and tariff escalation. The negotiations should also take into account the special needs and interests of the developing and least-developed countries. Two approaches, or modalities, have been proposed for the tariff negotiations of the Doha Round.<sup>10</sup>

The Formula Approach. The formula approach involves using a mathematical formula that would lead to tariff reductions for nearly all tariff-lines in every country. Exceptions are discussed below. While some form of this approach will most likely be adopted for the negotiations, there is still considerable disagreement concerning the parameters of the formula and how it would be applied, particularly in the developed and least developed countries.

The Chairman of the Negotiations Group on Market Access has produced a draft "Elements Paper" which suggests modalities for implementing the formula approach and exceptions which might be made for the developing and least developed countries [May 2003]. For example, least developing countries might not be required to reduce or eliminate tariffs, but would be expected to substantially increase the number of tariff bindings. Developing countries might be provided flexibility to keep tariff lines unbound, or to not apply the formula, for up to 5 percent of their tariff lines. However, no more that one percent of the exceptions could come from any one HS Chapter. Finally, countries with a very low level of tariff bindings

<sup>10</sup> The information in this section is based on Report of the Chairman of the Negotiations Group on Market Access to the Trade Negotiations Committee [WTO, Sept. 2003].

(less than 35% of total tariff lines) would be required to bind all lines at a level at or below the average for all developing countries after full implementation of the Agreement.

The formula approach was successfully used during the Uruguay Round and led to across-the-board tariff reductions by both developed and developing countries. One problem, however, is that high and low tariffs were generally reduced in equal percentages, thus leaving margins of preference between upstream and downstream industries unchanged. Although one goal of the negotiations was to reduce tariff escalation for products of interest to developing countries, there was no *a priori* reason to expect that the formula adopted during the Round would lead to such a result. Rather, it was up to individual countries to ensure that tariff escalation was indeed reduced. During the Doha Round, therefore, much of the discussion on the formula approach has focused on ways to ensure a substantial reduction in tariff peaks and tariff escalation.

The Sector Approach. The "sector" approach would require the elimination of all tariffs within a sector. In the "Elements Paper," the Chairman suggests that the sector approach would be mandatory and that it would be used to supplement and/or complement the formula approach. The Chairman also proposes that tariff elimination occur in three phases of equal length. In phase 1, the tariffs of developed countries would be reduced to zero, while tariffs in other countries would be reduced to not more than 10 percent. This ten percent would be maintained throughout phase 2. Tariffs would then be removed altogether in phase 3.

The sector approach was first used during the Uruguay Round when it was called "zero-for-zero." Zero-for-zero involved obtaining a critical mass of countries which voluntarily agreed to eliminate tariffs, export taxes, and export subsidies in the proposed sector. Once this critical mass was reached, the agreement was signed and new tariff bindings were introduced into each country's WTO schedule of commitments. During the Uruguay Round, zero-for-zero reductions were obtained for agricultural equipment, beer, certain chemicals, construction equipment, certain distilled spirits, furniture, medical equipment, paper, pharmaceuticals, steel and toys. It seems that zero for zero was fairly successful as an approach since zero-for-zero reductions have increased the share of developed country duty-free imports from 20 to 43 percent [Laird, 1998].

<sup>11</sup> If the bound rate, or the MFN applied rate in the case of an unbound item, was less than 10 percent in 2001, the lower rate would remain in place throughout phase 1.

The zero-for-zero approach was also used to eliminate tariffs on information technology products under the Information Technology Agreement (ITA). The ITA was first negotiated by members of the Asia Pacific Economic Cooperation (APEC), and then brought to the WTO at the Singapore WTO Ministerial Conference in 1996 for adoption by a wider group of countries. In Singapore, twenty-nine developed and developing countries agreed on a plurilateral basis to eliminate tariffs and other charges for information technology products by the year 2000. Developing countries were permitted a longer "staging" period (2005) for implementing the Agreement.

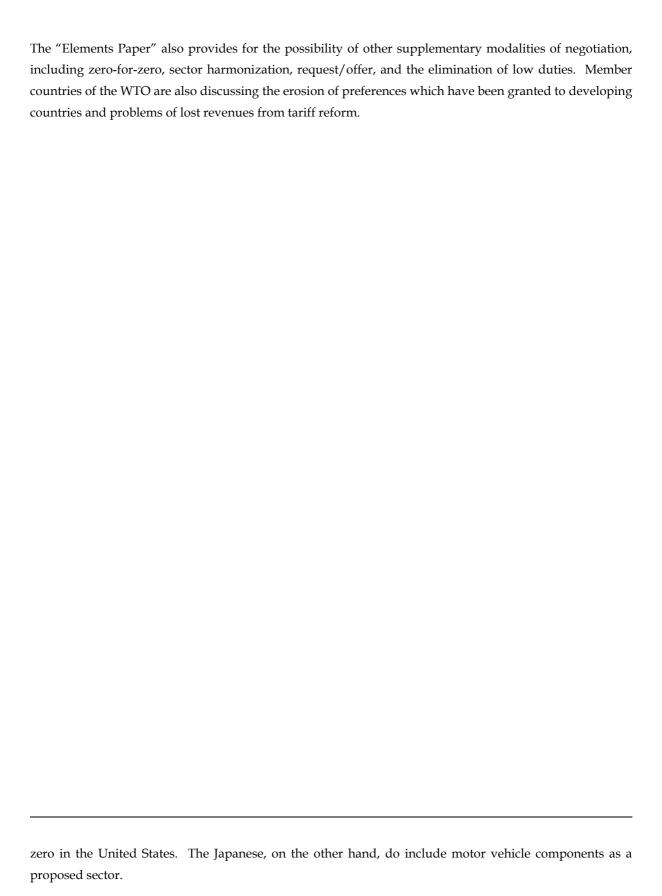
To date, seven sectors have been proposed for negotiation under the sector approach. These sectors are supposedly of particular interest to developing countries. The sectors have been proposed only in a general way. Once a sector has been agreed, countries would then have to negotiate the exact composition of the sector – in other words the HS codes for which tariffs would be reduced. The proposed sectors are:

- 1) Electronic and Electrical Goods:
- 2) Fish and Fish Products:
- 3) Footwear;
- 4) Leather Goods;
- 5) Motor Vehicles Parts and Components;
- 6) Stone, Gems and Precious Metals;
- 7) Textiles and Clothing.

The purpose of the sector approach is not yet clear. On the one hand, the sector approach was proposed as one way to further liberalize products of interest to developing countries. On the other hand, the approach seems to be favored by those countries which feel that the formula approach alone will lead to inadequate reduction in tariffs. These countries have thus proposed the sector elimination of tariffs as one way to make additional improvements in market access. Since these countries have their own economic interests and since those interests may very well differ from those of developing countries, it is not clear that the sectors thus proposed are indeed of interest to developing countries.<sup>12</sup>

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<sup>&</sup>lt;sup>12</sup> In a press conference in April 2003, the U.S. Trade Representative suggested that the sector approach would be used to complement the formula approach and would involve getting a critical mass of countries to support zero tariffs in a fashion similar to the ITA. In a separate statement by a U.S. trade association, motor vehicle components were not included among the 23 manufacturing sectors that support zero-for-



## 6. Impact Assessment

**Non-Agricultural Negotiations**. The Sector approach was originally proposed as a means to meet the mandate of the Doha Round by reducing tariffs that are of particular interest to developing countries. As indicated earlier, however, developing countries are not major exporters of motor vehicle products. The Chairman of the Negotiating Group has produced statistics which indicate that developing country exports account for 28% of the world trade of the products proposed for sector elimination. The developing country share is smallest for motor vehicle parts and components at less than 15%. Although motor vehicles are important in a number of cases (e.g., 3.6% Mexican manufacturing exports), other sectors are probably more important and for a larger number of countries.

**Tariff Reductions on Intermediate Products.** Since motor vehicle parts and components are intermediate products in the production of motor vehicles, the sector elimination of tariffs for these products would increase the protection effectively received by automobile assembly industries, but reduce protection received by parts and component manufacturers. This gives rise to two major problems. Internationally, increased protection for the assembly industry would lead to higher tariff escalation and possibly to less, rather than more world trade.

Domestically, reduced tariffs on parts and components would cause problems for countries that protect primary products and other upstream industries providing raw materials to the auto industry. This is likely to be the case in most countries of the world. As mentioned earlier, motor vehicles involve extensive linkages throughout the economy. This is illustrated in Chart 6, which provides a rough idea of the various stages of processing for motor vehicles and the Egyptian tariff structure for each. Although the exact products that would be included in sector elimination have not been negotiated, it is probable that the negotiations would be limited to those parts and components in Stage 3. Tariffs on Stage 2 intermediate products that are used in production during Stage 3, as well as raw materials in Stage 1, would not be included in sector elimination. As a result, producers of parts and components would have zero protection on their final products, but would still have to pay duties on their intermediate inputs and

raw materials. In other words, they would receive negative protection.<sup>13</sup> This would make it difficult for them to compete against imported parts that are produced using intermediate products priced at world levels.

If tariffs on parts and components are to be reduced, it would be better to make this part of a broader acrossthe-board reduction in tariffs that includes raw materials and other intermediate goods.

**Policy Scenarios and Options.** As noted earlier, an efficient parts and components industry is a prerequisite for a competitive motor vehicle industry. In formulating a strategy for the negotiations, Egypt should evaluate its own trade policy for the motor vehicle sector. Even if the multilateral gains from the sector approach on motor vehicle parts and components are likely to be small for developing countries, Egypt could find unilateral changes in policy that are in its own best interest. As noted earlier, Egypt might also have to eliminate its local content rule as a result of the TRIMs agreement.

Table 7 lays out various policy options for Egypt's local content rule, zero-for-zero in parts and components, and other tariff scenarios. Each scenario is evaluated against whether it benefits (++++) or harms (----) consumers, the motor vehicle assembly industry, the feeder industry which supplies the assembly industry, and the parts industry which supplies the after sales service and repair market. Options A and B look at the effect of adopting the zero-for-zero approach without and with changes in the local content rules. Options C, D, and E look at different ways of changing the local content rule.

Table 7: Impact of Various Tariff Options on Consumers and the Motor Vehicle Producers

	Local Content Maintained	Local Content Eliminated				
	Option A (0-0)	Option B (0-0)	Option C	Option D	Option E	
MV Assemblers	+++++	+++++	+++++	None	None	
Feeder Industry for Assemblers	None	     	       	None	None	
Parts Industry for after Sales/Repairs		     	None	+++++   	None	
Consumers: New Sales Repairs	+++++	+++++	+++++ None	None 	+++++ None	

Option A: Egypt maintains its local content rule, but eliminates tariffs on parts and components as part of the zero-for-zero negotiations of the Doha Round. Under this scenario, Egypt would remove the "tariff

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<sup>&</sup>lt;sup>13</sup> The motor vehicle industry, through its various trade associations, has volunteered to make a list of intermediate products whose tariffs might be reduced simultaneously with those for downstream parts industries.

reduction benefits" of its local content rule, but would still require assemblers to achieve their current level of local content. In the case of passenger cars, this level is 45%. In the case of buses and trucks, the level would be much higher. No matter how companies utilized the local content rule in the past, zero-for zero would imply that the industry pays zero tariff on parts and components. This would remove the major advantage of the local content rule and no company would utilize the rule, but they would still be required to achieve the same level of local content. This requirement might be made part of their license to do business in Egypt.

- The motor vehicle assembly industry benefits since it now pays zero duties on its imported components.
- The feeder industry is unaffected since the assembly industry is still required to purchase a certain percentage locally (e.g. 45% in the case of passenger cars).
- Parts manufacturers for after sales service lose since tariff protection is now zero and they face increased competition from imports.
- Consumers of new vehicles benefit since assemblers pass on part of their cost decreases in the form of lower prices.
- Consumers of after sales service and repairs benefit from lower prices on parts.

Option B: Egypt eliminates local content and sets all tariffs for parts and components at zero as part of the zero-for-zero negotiations of the Doha Round.

- The motor vehicle assembly industry benefits even more than under option A since it is no longer required to purchase anything locally and now pays zero duties on all imported components.
- The feeder industry declines since assemblers shift from local to imported components.
- Manufacturers of parts for repairs and after sales service lose since tariff protection is now zero and they face increased competition from imports.
- Consumers of new vehicles benefit since assemblers pass on part of their cost savings in the form of lower prices.
- Consumers of after sales service and repairs benefit from lower prices on parts.

Option C: Egypt eliminates the local content rule, but leaves its tariff structure unchanged.

- The motor vehicle assembly industry benefits since it is no longer required to purchase domestically and can reduce costs by importing more of its components.
- The feeder industry suffers lost sales as assemblers shift from local to imported components.
- Manufacturers of parts for repairs and after sale service are unaffected since tariff protection is unchanged,
- Consumers of new vehicles benefit since assemblers pass on part of their costs savings in the form of lower prices.
- Consumers of after sales service and repairs are unaffected since prices for parts are unchanged.

Option D: Egypt eliminates the local content rule, but provides additional tariff protection to the feeder industry in order to offset the elimination of local content. In other words, tariffs on parts and components are raised in order to provide protection that is equivalent to that provided by the local content rule. Based on discussions with the industry, this tariff increase might in the range of 10 to 20 percentage points. The net effect of the elimination of local content and increased tariffs is to leave the motor vehicle assembly and feeder industries unchanged.

- The motor vehicle assembly industry is unaffected. Although it is no longer required to purchase locally, it would have to pay higher duties on imported components. So it continues to purchase locally at the same price as before.
- The feeder industry is unaffected since there is no change in the demand by the assembly industry.
- Manufacturers of parts for repairs and the after sales market benefit from higher tariff protection.
- Consumers of new vehicles are unaffected since there is no impact on the assembly industry.
- Consumers of repairs and after sales service are worse off since they face higher prices for parts.

**Option E** -- <u>The Protection Equivalent of Existing Policies</u>: The previous option aims at leaving the assembly and feeder industries unchanged by the elimination of local content, but does involve raising tariffs for the parts and components industry. An alternative would be to devise a tariff structure that leaves "effective protection" for all industries unchanged after the elimination of the local content rule. This would involve two steps: 1) reduce tariffs on completely built up vehicles in order to offset the benefits from elimination of the local content rule; and 2) reduce tariffs on intermediate goods and raw materials used in the parts industry so as to offset the negative impact of eliminating local content. This scenario has the added benefit that reduced prices for motor vehicles is likely to lead to increased sales and thereby benefit companies throughout the industry. The scenario

would require close collaboration with the industry in order to identify which tariff lines should be reduced.  $^{14}$ 

In implementing Option E, the Government might also consider introducing a tariff structure similar to that used by other WTO members who have eliminated local content rules. Among such countries are Thailand, Indonesia, Malaysia, and the Philippines. The tariff structures are based on completely built-up vehicles (CBU) and vehicles in completed knock-down condition (CKD). An example for passenger cars is given below in Table 6, where we have also reduced tariffs on CBUs from current levels in order to reflect reduced tariffs on parts and components. This would leave "effective protection" for vehicle assembly unchanged after the elimination of the local content rule, and could form the basis for reforms in the future.

**Table 8: Suggested Tariff Structure for Passenger Cars** 

	Passen	Passenger Cars								
Cylinder Capacity	Less th	an 1000	1000-13	300	1300-16	600	1600-20	000	Greate 2000	r than
CKD vs CBU	CKD	CBU	CKD	CBU	CKD	CBU	CKD	CBU	CKD	CBU
Tariff	27	40	27	50	27	95	27	95	27	130
Sales Tax*	15		15		15		30		45	

<sup>\*</sup> All 4x4 vehicles have a sales tax of 30% independent of engine size. Typically, the engine size for such vehicles is greater than 2000cc.

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<sup>14</sup> If lost tariff revenues are a major concern of the government, the sales tax could be increased as required. Several other countries, which eliminated local content, made adjustments to both tariffs and the sales tax.

### 7. Conclusions

Zero-for-zero negotiations on parts and components seem to contradict one of the basic objectives of the Doha Round and also the goals of trade negotiations more generally. Zero-for-zero was proposed as one way to eliminate tariffs on sectors that are of strategic interest to developing countries. However, exports of motor vehicle parts and components from developing and least developed countries make up less than 15% of world trade. Other products are of far more strategic interest to developing countries than motor vehicle parts and components. In addition, lowering tariffs on intermediate goods used in the assembly of motor vehicles would raise effective protection for assembled vehicles. This could lead to reduced world trade, not increased trade as desired by the negotiations.

Experiences from other countries show that a competitive assembly industry must be supported by an efficient parts and component industry. Economic growth and Egypt's various regional trade agreements provide greater potential for scale economies in some products and could lead to new opportunities. It is therefore recommended that Egypt unilaterally consider policies that focus on developing an efficient parts and components industry.

Zero-for-zero on parts in components would provide increased protection for the assembly industry and negative protection for parts and components. This is particularly the case if Egypt is also required to eliminate its local content rule. Negative protection would likely make it difficult for an efficient parts and component industry to develop. If tariffs and parts and component tariffs are to be reduced, it would be better to make this part of a broader across-the-board reduction in tariffs.

Egypt's local content rules likely leads to numerous inefficiencies in the industry and may also violate the WTO TRIMs Agreement. Most members of the WTO have eliminated local content rules and replaced them with tariff structures that are based on completely built-up vehicles (CBU) and vehicles in completed knock-down condition (CKD). Among the countries with such structures are Thailand, Indonesia, Malaysia, and the Philippines. An option for Egypt would be to devise a similar structure. Within that structure, tariffs might be adjusted so as leave "effective protection" unchanged after the elimination of the local content rule. This could then form the basis for reforms in the future.

### Chart 6: Egyptian Tariffs by Stage of Processing in the Automobile Industry

#### Stage 4:

#### **Motor Vehicle Manufacturing**

#### **Stage 3: Parts and Components**

(Bodies, Electrical Components and Systems, Wiring Systems, Tires, Windows, Batteries, Power Trains, Engines, Exhaust Systems, Cooling Systems, Brake Systems, Exhaust Systems, Seats, Accessories (20%-40%)

### Stage 2: Intermediate Inputs At Various Stages of Processing

Processed Rubber, Plastic Resins, Fabrics and Yarns, Screws and Machine Products, Copper Wires, Paints, Industrial Chemicals, Finished Steel, Aluminum Sheets and Plates (5%-54%)

#### **Stage 1: Raw Materials**

Natural Rubber, Steel, Coal/Coke, Non Ferrous Metals, Crude Petroleum, Organic and Non-Organic Chemicals (3%-30%)

### References

- Automotive Marketing Information Council (AMIC), data on the Egyptian auto market, mimeo.
- Chinese Academy of Engineering and the National Research Council, *Personal Cars and China*, The National Academies Press, Washington DC, 2003.
- Development Support Program, "Assessment of Egypt's Compliance with the WTO's Trade Related Investment Measures Agreement," Cairo, March 11, 2004.
- Hertel, Thomas W., Global Trade Analysis, Cambridge University Press, 1997.
- Karmolkolias, Yannis, "Automotive Industry Trends and Prospects for Investment in Developing Countries," International Finance Corporation Discussion Paper, IFD-7.
- Laird, Sam, "Multilateral Approaches to Market Access Negotiations," Staff Working Paper, TPRD-98-02, Trade Policy Review Division, WTO, May 1998.
- Office of Industrial Economics, Ministry of Industry, Republic of Thailand, "Automotive Industry in Thailand," March 2002.
- Organization Internationale des Constructeurs d'Automobiles, "World Motor Vehicle Production 2002/2003, Sales Forecasts 2003/2004; Exports 2002/2003," Paris, March 2004.
- Productivity Commission of Australia, *Review of Automotive Assistance*, Inquiry Report No. 25, 30 August 2002.
- Pursell, Garry, "Australia's Experience with Local Content Programs in the Auto Industry: Lessons for India and other Developing Countries," mimeo, 1999.
- Refaat, Amal, "Trade-Induced Protectionism in Egypt's Manufacturing Sector," The Egyptian Center for Economic Studies, Working Paper No. 85, June 2003.

- Tohamy, Sahar and Rachid Benjelloun, "Analysis of the Local Content Clause," Assistance for Trade Reform Project, Egyptian Ministry of Foreign Trade, mimeo, March 15, 2004.
- U.S. Trade Representative, Press Conference Transcript, OECD, 30 April, 2003, Paris France.
- World Trade Organization, "Draft Elements of Modalities for Negotiations on Non-Agricultural Products, Negotiating Group on Market Access," TN/MA/W/35, 16 May 2003.
- World Trade Organization, "Report by the Chairman of the Negotiating Group on Market Access to the Trade Negotiations Committee," TN/MA/12, 1 September 2003.
- World Bank, "Country Assistance Strategy for the Arab Republic of Egypt," Report No. 22163-EGT, June 5, 2001

# Appendix A. Vehicle Firms and Brands in Egypt

Name of Firm	Brand	Country of Origin
Passenger Cars*		
Suzuki Egypt	Suzuki	Japan
EGA (Egyptian German Auto)	Mercedes	Germany
Peugeot Egypt (Wahih Abaza)	Peugeot	France
Al Watania Vehicle Manuf.	KIA	S. Korea
Ghabbour Group	Hyundai	S. Korea
General Motors Egypt	Opel	Germany
Bavarian Auto Trading	B.M.W	Germany
Daewoo Egypt	Daewoo	S. Korea
JAC	Citroen	France
FIAT Egypt	FIAT	Italy
LADA Egypt	LADA	Federal Russia
Nasr Car Industry	Dogan, Shanin	Turkey
AAV (Arab American Vehicle)	Jeep Cherokee, Wrangler	USA
Commercial Vehicles		
General Motors Egypt	Isuzu, Chevrolet, Frantera	Japan, U.S.
Engineering Comp. for Car Ind.	Nasr, Daewoo, IVECO, Renault	Italy, S. Korea, France
Nissan Egypt	Nissan	Japan
Ghabbour Group	Volvo, Scania, Mitsubishi	Sweden, India, Japan
Suzuki Egypt	Suzuki	Japan
JAC	Mitsubishi (Pickup)	Japan
Goreika Egypt	MAN Trucks	Germany
Manuf. of Commercial Vehicles	Mercedes	Germany
Bodies/Fittings		
Al Alamia (International) For Vehicle Industry		
Misr Company for Chassis Building (HASSAN)		
Al-Wahab		
Al-Attar for Equipment		DAF Agents- Holland

Source: Compiled from various sources, including the Egyptian Automobile Manufacturers Association. Note: Nissan has also recently received approval to invest in Egypt provided that 50% of p roduction is exported. Components can be included in exports.

# Appendix B. Egyptian Tax Structure for Motor Vehicles and Parts

Appendix B1: Ta riffs on Motor Vehicles, Engines, Trailers and Certain Parts Thereof

	Finished Product	Engines (Parts)	Trailers (Parts)
Vehicles for Transport of goods	30%	10% (30%)	40% (30%)
Road Tractors	30%	10% (30%)	40% (30%)
Vehicles for Transport of 10 or more people	40%	10% (30%)	40% (30%)
Golf, snow Vehicles	135%	10% (30%)	40% (30%)
Ambulances and hearses	10%	10% (30%)	40% (30%)
Jeep type military vehicles	55%	10% (30%)	40% (30%)
Caravan for housing or camping, except when imported for tourism	135% except 75% in case of tourism	10% (30%)	40% (30%)
Special Purpose Vehicles	30%	10% (30%)	40% (30%)

### Appendix B2: Tariffs/Sales Tax on other Motor Vehicles, Mainly Passenger Cars

Cylinder Capacity	Less than 1000	1000-1300	1300-1600	1600-2000	2000-3000	Greater than 3000
Tariff on Motor Vehicles other than those in Table 2b	40%	55%	100%	100%	135%	135%
Sales Tax	15%	15%	15%	30%	45%*	45%
Tariff on Engines (Parts)	30% (30%)	30% (30%)	30% (30%)	30% (30%)	30% (30%)	30% (30%)

All 4x4 vehicles have a sales tax of 30% independent of engine size. Typically, the engine size for such vehicles is greater than 2000cc.

Appendix B3: Parts and Components of Motor Vehicles.

	HS Chapter	Tariff
Chassis fitted with engines	8706	Same as finished good tariff after being reduced 10%
Bodies	8707	Same as finished good tariff after being reduced 10%
Bumpers and other parts of bodies	8708	20%
Brakes		
Gear boxes		
Drive axles and parts		
Shock absorbers		
Mufflers and exhaust pipes		
Clutches		
Steering wheels, columns and boxes		
Framed glass	8708	30%
Radiators	8708	40%
Tires and inner tubes	4011-4013	30%
Transmission belts, rubber parts and accessories	4010, 4016	20%
Other rubber parts and accessories	4016.994	20%
lSafety glass and units	7007, 7008	30%
Mirrors	7009	40%
Batteries	8507	30%
Engine starting equipment, generators, etc	8511	20%
Windscreen wipers, defrosters and parts	8512	20%
Radios (parts)	8527, 8529	40% (43%)
Sealed beam lamp units	8539.1	20%
Ignition wiring sets	8544.3	30%
Seats	9401.2	40%

# Appendix C: Implications of Egypt's Local Content Rule (Lessons Learned from Other Countries) 15

Based on the experiences of other countries, high tariff protection and efforts to increase domestic value added through local content requirements are likely to lead a fragmented market with a large number of models and with production volumes that are too small for economies of scale. That this is the case in Egypt seems readily apparent. There are some passenger cars where assembly volumes are 2000 or less per year.

The use of local content rules as a means to increase domestic value added can also cause numerous inefficiencies. For example, local content requirements cause a perverse incentive structure whereby high cost components are in greater demand because they allow manufactures to more easily meet the content requirement. The net affect is to raise costs for assemblers, who then argue for lower local content ratios, lower tariffs on parts, or higher tariffs on built-up cars.

Local content also retards technological change by making it difficult for manufacturers to introduce new technologies on components that are produced by local firms. This problem was recently cited in Brazil as one factor responsible for the country's declining production and export of motor vehicles. It also leads to lower quality components. In Egypt, it was reported that assemblers use low quality domestically produced tires, which are then traded in by consumers immediately after vehicles are purchased.

Administration of local content may involve a great deal of micro management of the industry by Government agencies. The resulting costs to the Government and the private sector can be extremely high. A well managed scheme may require:

 $<sup>15</sup>_{THIS\,SECTION\,IS\,BASED\,ON\,[PURSELL,1999]}$ .

- a) The examination of detailed cost and sales records of each producer;
- b) Ensuring that the program is flexible enough to allow producers to switch from local to imported components, and vice versa;
- c) Overseeing the prices charged for domestically produced components in order to ensure that local content is not artificially inflated;
- d) Overseeing the prices of import components in order to ensure that assemblers do not under invoice imported inputs to help meet local content requirements;
- e) Adjusting local requirements for movements in the exchange rate and other changes in the market.

Finally, local content may lower rather than raise employment in the auto industry. Employment in car repairs and the sale of auto replacement parts/tyres may greatly exceed that of component manufacturing. Price elasticities of demand for autos are high at about minus 1.0. Thus, eliminating local content could lead to lower automotive prices, higher demand for autos, and higher overall employment in the industry.

# Appendix D: Egyptian Trade in Motor Vehicles and Motor Vehicle Parts (2002)

HS code and Description		Imports	Exports
		Million \$	
4011	Pneumatic Rubber Tyres	60.12	27.89
4016	Rubber Parts	1.13	0.03
4012-4013	Treads and Inner Tubes of Rubber, Retreads	2.46	0.85
7007, 7008	Glass for Transport Vehicles	0.29	0
7009	Rear View Mirrors	0.68	0.04
8407	Engines and Engine Parts	21.81	0.00
8544.3	Ignition Wiring Sets	3.54	0
8507	Batteries and Parts	5.34	0.02
8511	Ignition Equipment (spark plugs, starters, etc)	6.56	0
8512	Lighting/Signaling Equipment, Windscreen Wipers	6.39	0.01
8527	Radios	2.02	0
8529	Aerials and Reflectors	0.81	0
8539	Seal Beam Lamp Units	0.16	0
8702	Busses	27.32	0.22
8703	Passenger Cars and Other Vehicles	62.51	0
8704	Trucks	52.86	4.27
8706	Chassis Fitted with Engine	0.58	0.00
8707	Motor Vehicle Bodies	3.64	0.02
8708.1	Bumpers and Parts Thereof	2.78	0.01
8708.2	Parts and Accessories of Bodies, including Seat Belts	32.58	0.12
8708.3	Brakes and Brake Linings	7.19	0.10

8708.4	Gear Boxes	2.64	0.02
8708.5	Drive Axles with Differentials	3.47	0
8708.6	Non Dev Axles and Parts Thereof	10.47	0
8708.7	Road Wheels	7.95	0.03
8708.8	Suspension Systems and Shock Absorbers	2.93	0
8708.91	Radiators	2.13	0.04
8708.92	Mufflers and Exhaust Systems	1.75	0
8708.93	Clutches and Parts Thereof	5.13	0.02
8708.94	Steering Columns	3.01	0
8708.99	Other Parts, Including Frame Glass	69.14	0.80
9401.2	Seats	0.89	0
	TOTAL	410.29	34.49